

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

1-19. (Canceled)

20. (Currently amended) A kit for assaying free protein S, the kit comprising:

a ligand selected from a group consisting of a polypeptide comprising the entire or essentially the entire protein S binding site in C4b-binding protein (C4BP), and a polypeptide having essentially the same protein S binding properties as C4BP comprising an amino acid sequence homologous or analogous to the extreme N-terminal SCR module of the  $\beta$ -chain protein S binding site of the C4BP molecule, the ligand being capable of binding a free protein S at a first site;

~~and a reagent other than protein S comprising at least one of an antibody specific for protein S, a fragment thereof, that binds protein S at a site distinct from the first site; and~~

an indicating means capable of producing a detectable signal indicative of the formation of a complex between free protein S<sub>1</sub> ~~and the ligand, and the reagent.~~

21. (Currently amended) The kit of claim 20, wherein the ligand is operatively linked to a ~~solid~~ carrier.

22. (Currently amended) The kit of claim 21, wherein the ~~solid~~ carrier is a microtiter plate.

23-30. (Canceled)

31. (Currently amended) A ~~composition~~ kit for purifying free protein S from an aqueous solution comprising

a ligand selected from a group consisting of a polypeptide comprising the entire or essentially the entire protein S binding site in C4b-binding protein (C4BP), and a polypeptide having essentially the same protein S binding properties as C4BP comprising an amino acid sequence homologous or analogous to the extreme N terminal SCR module of the  $\beta$ -chain protein S binding site of the C4BP molecule; and

at least one further reagent for purification of protein S, wherein the at least one further reagent is capable of releasing protein S from a complex comprising free protein S and the ligand.

32. (Canceled)

33. (Currently amended) The kit of claim 21, wherein the ~~solid~~ carrier is a bead.

34. (Currently amended) The kit of claim 21, wherein the ~~solid~~ carrier is of a structure selected from the group consisting of a ~~microtiter~~ plate, a bead, a matrix, a gel, a sheet, a strip, and a tube.

35. (Currently amended) The kit of claim 5021, wherein the antibody is a monoclonal antibody.

36. (Currently amended) The kit of claim 5021, wherein the antibody is a polyclonal antibody.

37. (Currently amended) The kit of claim 20, wherein the ligand comprises the extreme N-terminal SCR[[-]]module of the beta $\beta$ -chain of the C4BP molecule.

38. (Previously presented) The kit of claim 20, wherein the indicating means is selected from the group consisting of a chromogenic label, a fluorescent label, a chemiluminogenic label, an enzymatic label, and a radioactive label.

39. (Previously presented) The kit of claim 20, wherein the indicating means comprises horseradish peroxidase.
40. (Previously presented) The kit of claim 20, further comprising a substrate for visualizing the detectable signal.
41. (Previously presented) The kit of claim 20, wherein the indicating means is operatively linked to, or incorporated into, the ligand.
42. (Currently amended) The kit of claim 20, wherein the indicating means is operatively linked to, or incorporated into, the reagent antibody or fragment thereof.
43. (Canceled)
44. (Currently amended) The ~~composition~~ kit of claim 31, wherein the ligand comprises the extreme N-terminal SCR ~~[[ - ]]~~ module of the beta $\beta$ -chain of the C4BP molecule.
45. (Currently amended) The ~~composition~~ kit of claim 31, wherein the ligand is bound to a ~~solid~~ carrier.
46. (Currently amended) The ~~composition~~ kit of claim 45, wherein the ~~solid~~ carrier is of a structure selected from the group consisting of a ~~microtiter~~ plate, a bead, a matrix, a gel, a sheet, a strip, and a tube.
47. (Currently amended) The ~~composition~~ kit of claim 45, wherein the ~~solid~~ carrier is a bead.
48. (New) The kit of claim 20, wherein the first site is the C4BP binding site in protein S.
49. (New) The kit of claim 20, wherein the reagent comprises an antibody or a fragment thereof.
50. (New) The kit of claim 21, wherein the carrier is of a material selected from the group consisting of dextran, agarose, polystyrene, polyvinyl chloride, polyacrylamide, nitrocellulose, and nylon.

51. (New) The kit of claim 45, wherein the carrier is of a material selected from the group consisting of dextran, agarose, polystyrene, polyvinyl chloride, polyacrylamide, nitrocellulose, and nylon.
52. (New) The kit of claim 20 further comprising calcium ion.
53. (New) The kit of claim 20, wherein the ligand is synthetic or recombinant.
54. (New) The kit of claim 53, wherein the ligand comprises multiple subunits, each of which contains a protein S binding site.
55. (New) The kit of claim 20, wherein the ligand is derived from C4BP isolated from blood.
56. (New) The kit of claim 55, wherein the ligand is derived from C4BP through enzymatic cleavage.
57. (New) The kit of claim 49, wherein the indicating means is operatively linked to, or incorporated into, the antibody or fragment thereof.
58. (New) The kit of claim 31, wherein the ligand comprises multiple subunits, each of which contains a protein S binding site.